

## Management Indicator Species for the New Plan

Success in maintaining and restoring composition, structure, and function of forest ecosystems within desired ranges of variability is reflected by both changes in forest condition and by levels of management and other effects that are shaping these communities. Monitoring will include tracking the abundance of major forest cover/community types and levels of management activities conducted to maintain and restore desired conditions. Population trends and habitats of Management Indicator Species will be monitored to help indicate effects of national forest management within selected communities.

**Indicator:** Scarlet Tanager (*Piranga olivacea*)



From USGS Patuxent Bird ID InfoCenter

**Reasons for Selection:** To indicate trends in presence and abundance of this species in the upland oak community, the scarlet tanager is selected to help indicate the effectiveness of management.

### Ecology & Life History

**Basic Description:** An 18-cm bird (tanager).

**General Description:** In the spring and early summer, the male is scarlet, with black wings and tail. During the late summer and fall, splotchy green is evident within the red as the molt to the yellow-green winter plumage begins.

Measurements: length 17 cm, mass 23.5-33 g. The female is dull greenish above with yellowish below. Wings are dark brownish to blackish. The immature male resembles the adult female, but is brighter below, with brownish primaries that are retained throughout the first summer. Wing coverts are black.

Fledglings are olive green above with dark white streaks below. Wings are dark brownish or blackish. Some show faint wing bars. An illustration appears in NGS (1987).

**NEST:** a small, loose, flat saucer-shaped nest of twigs, rootlets, coarse grass, and weed stems. Inside lined with finer grasses, weed stems, or pine needles. Eggs sometimes can be seen through the bottom.

**EGGS:** pale blue to pale green with irregularly dotted, spotted, blotched browns. These markings are often concentrated at the large end. Sources for this section are Senesac (1993), Isler and Isler (1987), Terres (1980), Harrison (1975), Prescott (1965), and Bent (1958).

**Diagnostic Characteristics:** No other North American bird has the male's color combination (Terres 1980). Female scarlet and summer (P. RUBRA) tanagers are distinguished by the scarlet's yellow-green plumage compared to the summer's orange-yellow. The female scarlet also has a smaller, darker bill (Terres 1980). Where ranges of the summer and scarlet tanagers overlap, positive identification of similar nest and eggs should not be made until a bird is seen (Harrison 1975).

**Reproduction Comments:** Males arrive in breeding areas in April and May, usually several days before the female, and establish a territory by singing almost continuously from conspicuous perches high in the canopy of mature trees. Territorial boundaries are not rigid and males frequently dispute, especially when the female is present (Isler and Isler 1987, Prescott 1965). Once paired, the male abandons the high perch. The female chooses the nest site and builds the nest alone (Isler and Isler 1987). The nest is built in 2-7 days.

In the mid Atlantic states, nesting extends from early May to early August, with a peak from late May to mid-July (Bushman and Terres 1988). Eggs are laid mostly in May-June. Clutch size is 3-5 (usually 4). Incubation, by female, lasts 12-14 days. Young are tended by both parents, leave nest at 9-15 days. The nestlings are brooded by the female for about 3 days after they hatch. During this time both parents feed the young. It is thought that only one brood is raised per season (Senesac 1993, Isler and Isler 1987, Prescott 1965).

### **Ecology Comments**

In migration, this usually solitary tanager sometimes is found in loosely associated groups and may join mixed-species flocks. Summer home ranges often relatively large for a forest passerine; territory size varies a great deal, reported sizes 0.8 to 12.5 hectares (summarized in Mowbray 1999).

### **Long Distance Migrant:** Y

**Migration Comments:** Arrives in most of U.S. through April, in northern U.S. and southern Canada by early to mid-May (Terres 1980). Migrates through Middle America and in smaller number in West Indies. Rare spring and fall migrant in West Indies (Raffaele 1983). Fairly regular passage migrant in

Netherlands Antilles (Ridgely and Tudor 1989). Migration in Costa Rica late September-early November and late March-early May (Stiles and Skutch 1989). Arrives in Colombia by October, departs by early May (Hilty and Brown 1986).

**Palustrine Habitat(s):** RIPARIAN

**Terrestrial Habitat(s):** FOREST - HARDWOOD, FOREST - MIXED, WOODLAND - HARDWOOD, WOODLAND – MIXED.

**Habitat Comments: BREEDING:** Deciduous forest and mature deciduous woodland, including deciduous and mixed swamp and floodplain forests and rich moist upland forests; prefers oak trees (Bushman and Therres 1988), Nests less frequently in mixed forest (Hamel et al. 1982, Hamel 1992). Most common in areas with a relatively closed canopy, a dense under story with a high diversity of shrubs, and scanty ground cover; able to breed successfully in relatively small patches of forest (Bushman and Therres 1988). Also sometimes nests in wooded parks, orchards, and large shade trees of suburbs (Isler and Isler 1987, Senesac 1993). Breeds in various forest stages but is most abundant in mature woods (according to some sources, prefers pole stands). In New England, nests mainly in sawtimber hardwoods.

Nests are placed in trees usually well out on limb, commonly in oak, 2-23 m above ground. Typical nest site characteristics: 1) the nest is placed in a leaf cluster, or with at least several leaves shading the nest, 2) the nest is placed on a nearly horizontal tree branch, 3) there is a clear unobstructed view of the ground from the nest, and 4) there are flyways from adjacent trees to the nest (Senesac 1993).

**NON-BREEDING:** in winter, primarily forest canopy, also forest edges and tall second growth (Isler and Isler 1987). In migration occurs in more open habitats, such as woodlands, parks, and gardens, as well as forests (Isler and Isler 1987).

**Food Habits:** FRUGIVORE, INVERTIVORE

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